### West Virginia Department of Environmental Protection Division of Air Quality

## **Fact Sheet**



# For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on February 1, 2018.

Permit Number: R30-00900004-2018
Application Received: March 26, 2020
Plant Identification Number: 03-54-009-00004
Permittee: Jupiter Aluminum Corporation

Facility Name: **Jupiter Coil Coating**Mailing Address: **8963 River Road, Wellsburg, WV 26070** 

Permit Action Number: MM01 Revised: November 16, 2020

Physical Location: Beech Bottom, Brooke County, West Virginia

UTM Coordinates: 528.81 km Easting • 4452.42 km Northing • Zone 17

Directions: Facility is located on the west side of WV State Rt. 2, just south of Beech

Bottom.

#### **Facility Description**

The Jupiter Coil Coating Plant manufactures coated metal coils under Standard Industrial Classification (SIC) code 3479.

This minor modification is for the replacement of the Regenerative Thermal Oxidizer (RTO) with a new one and incorporates the changes made under R13-2379F.

#### **Emissions Summary**

When the RTO was originally permitted in 2005 (R13-2379C), the permittee based emission calculations on a manufacturer's guarantee for NO<sub>x</sub> and AP-42 emission factors for PM, CO and SO<sub>2</sub>. VOC emissions were based on AP-42 (natural gas combustion for the supplemental fuel) and a mass balance of VOC loading into the RTO with a vendor guaranteed destruction rate of 98%. During review of permit R13-2379D in 2015, PM, CO and NO<sub>x</sub> emission limits were significantly increased. The writer could find no reason in Engineering Evaluation R13-2379D for this increase. With this application, Jupiter reasonably

calculated emissions based on AP-42 emission factors. This is the reason that there appears to be a larger decrease in emissions of NO<sub>x</sub>, CO and PM than would reasonably be expected when decreasing heat input from 18 mmbtu/hr to 15 mmbtu/hr. VOC emissions are once again based on AP-42 for supplemental fuel combustion and a mass balance of VOC into the RTO and assumed 98% destruction efficiency. The trivial increase in VOC emissions appears to be due to the emissions from the supplemental fuel not being included in the actual permit when the existing RTO was originally permitted (although they were included in that permit application). Therefore, this modification results in the following emission changes:

СО		NOx		PM/PM <sub>2.5</sub>		SO <sub>2</sub>		VOCs	
lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
-2.79	-12.24	-4.42	-19.38	-1.49	-6.52	-0.02	-0.08	0.07	0.29

#### **Title V Program Applicability Basis**

Jupiter Aluminum Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30 in accordance with 45CSR\$30-3.1.a.3. The facility is subject to 40 CFR 63, Subpart SSSS and was a major source of HAPs before the effective date of this subpart.

#### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited		
	45CSR7	Particulate Matter Emissions		
	45CSR10	Sulfur Oxides Emissions		
	45CSR13	Construction Permits		
	45CSR16	Performance Standards for New Stationary Sources		
	45CSR30	Operating permit requirement.		
	45CSR34	Emission Standards for HAPs		
	40 CFR 60 Subpart TT	Standards of Performance for Metal Coil Surface		
		Coating		
	40 CFR 63, Subpart SSS	S Surface Coating of Metal Coil MACT		

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

The active permits/consent orders affected by this modification are as follows:

Permit or	Date of	Permit Determinations or Amendments That		
Consent Order Number	Issuance	Affect the Permit (if any)		
R13-2379F	June 15, 2020			

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

The following changes were made to the Title V Permit during this Minor Modification:

- Table 1.1 was updated to reflect the replacement of the old RTO with the new one.
- Condition 3.5.3 of the boiler plate was updated.
- Updated Title line of Section 5.0 with new RTO's Emission Point ID.
- Conditions 5.1.1 5.1.5, 5.1.8, 5.1.10 5.1.16, 5.2.1, 5.2.3 5.2.5, 5.3.1, 5.3.3, and 5.3.4 all had their citations updated to reflect the change of the RTO's Emission Point ID from 11E to 12E.
- Condition 5.1.3 was updated for the new RTO's 45CSR§6-4.1 emission limit.
- The citation for condition 5.1.9 was changed to reflect the change of the RTO's control device number from 3C to 4C.
- Condition 5.1.13 was updated to reflect the new emission limits and new Emission Point ID and control device number.
- Condition 5.1.14 was updated to reflect a 98% control efficiency and new Emission Point ID and control device number.
- Conditions 5.1.15 and 5.1.16 were updated to reflect the new Emission Point ID and control device number.
- Condition 5.5.1 was updated to reflect the new Emission Point ID.

#### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

**40 CFR Part 64 - Compliance Assurance Monitoring (CAM)** - Emission units with a control device are subject to an NSPS and MACT. Therefore, the facility is exempt from Compliance Assurance Monitoring in accordance with 40 CFR §64.2(b)(1)(i).

#### **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: Not Applicable for minor modifications.

Ending Date: N/A

#### **Point of Contact**

All written comments should be addressed to the following individual and office:

Robert Mullins

West Virginia Department of Environmental Protection

Division of Air Quality 601 57th Street SE

Charleston, WV 25304

Phone: 304/926-0499 ext. 41286 Robert.A.Mullins@wv.gov

#### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Response to Comments (Statement of Basis)**

Not applicable.